Complete Summary

GUIDELINE TITLE

Diagnosis and management of placenta previa.

BIBLIOGRAPHIC SOURCE(S)

Oppenheimer L, Society of Obstetricians and Gynaecologists of Canada. Diagnosis and management of placenta previa. J Obstet Gynaecol Can 2007 Mar;29(3):261-6. [59 references] PubMed

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

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SCOPE

DISEASE/CONDITION(S)

Placenta previa

DISCLAIMER

GUIDELINE CATEGORY

Assessment of Therapeutic Effectiveness Diagnosis Evaluation Management Prevention

CLINICAL SPECIALTY

Anesthesiology
Family Practice
Internal Medicine
Obstetrics and Gynecology

INTENDED USERS

Advanced Practice Nurses Health Care Providers Hospitals Physicians

GUIDELINE OBJECTIVE(S)

To review the use of transvaginal ultrasound for the diagnosis of placenta previa and recommend management based on accurate placental localization

TARGET POPULATION

Pregnant women with placenta previa

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis/Evaluation

Transvaginal sonography (TVS)

- Distance from placental edge to internal cervical os
- Indications for repeat ultrasound
- Indication for Caesarean section (CS) delivery

Management

CS delivery

- Risk for placenta accrete and planning of delivery accordingly
- Regional anesthesia
- Appropriate setting for placenta accreta, if indicated

MAJOR OUTCOMES CONSIDERED

- Incidence and prevalence of placenta previa
- Incidence and prevalence of placenta accreta
- Full-term delivery rate
- Premature delivery rate
- Vaginal delivery rate
- Caesarean section (CS) delivery rate
- Incidence of hysterectomy after CS

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

MEDLINE search for "placenta previa" and bibliographic review.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Quality of Evidence Assessment*

- I: Evidence obtained from at least one properly randomized controlled trial
- **II-1**: Evidence from well-designed controlled trials without randomization
- **II-2**: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group
- **II-3**: Evidence obtained from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category
- **III**: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

^{*}Adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on the Preventive Health Exam Care.

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Classification of Recommendations*

- **A**. There is good evidence to recommend the clinical preventive action.
- **B.** There is fair evidence to recommend the clinical preventive action
- **C**. The existing evidence is conflicting and does not allow to make a recommendation for or against use of the clinical preventive action; however, other factors may influence decision-making.
- **D**. There is fair evidence to recommend against the clinical preventive action.
- **E.** There is good evidence to recommend against the clinical preventive action.
- **I**. There is insufficient evidence (in quantity or quality) to make a recommendation; however, other factors may influence decision-making.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

This guideline was compared with "Placenta previa and placenta previa accreta: diagnosis and management." Royal College of Obstetricians and Gynecologists, Guideline No. 27, October 2005.

This guideline has been reviewed by the Clinical Obstetrics Committee and approved by the Executive and Council of the Society of Obstetricians and Gynaecologists of Canada (SOGC).

^{*}Adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on the Preventive Health Exam Care.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Definitions of the levels of evidence (I, II-1, II-2, II-3, and III) and grades of recommendations (A-E and I) are provided at the end of the "Major Recommendations" field.

Diagnosis of Placenta Previa

1. Transvaginal sonography (TVS), if available, may be used to investigate placental location at any time in pregnancy when the placenta is thought to be low-lying. It is significantly more accurate than transabdominal sonography, and its safety is well established. (II-2A)

Prediction of Placenta Previa at Delivery

- 2. Sonographers are encouraged to report the actual distance from the placental edge to the internal cervical os at TVS, using standard terminology of millimetres away from the os or millimetres of overlap. A placental edge exactly reaching the internal os is described as 0 mm. When the placental edge reaches or overlaps the internal cervical os on TVS between 18 and 24 weeks' gestation (incidence 2 to 4%), a follow-up examination for placental location in the third trimester is recommended. Overlap of more than 15 mm is associated with an increased likelihood of placenta previa at term. (II-2A)
- 3. When the placental edge lies between 20 mm away from the internal os and 20 mm overlap after 26 weeks' gestation, ultrasound should be repeated at regular intervals depending on the gestational age, distance from the internal os, and clinical features such as bleeding, because continued change in placental location is likely. Overlap of 20 mm or more at any time in the third trimester is highly predictive of the need for Caesarean section (CS). (III-B)

Route of Delivery at Term

- 4. The os-placental edge distance on TVS after 35 weeks' gestation is valuable in planning route of delivery. When the placental edge lies > 20 mm away from the internal cervical os, women can be offered a trial of labour with a high expectation of success. A distance of 20 to 0 mm away from the os is associated with a higher CS rate, although vaginal delivery is still possible depending on the clinical circumstances. (II-2A)
- 5. In general, any degree of overlap (> 0 mm) after 35 weeks is an indication for Caesarean section as the route of delivery.(II-2A)

Inpatient Versus Outpatient Management

6. Outpatient management of placenta previa may be appropriate for stable women with home support, close proximity to a hospital, and readily available transportation and telephone communication. (II-2C)

Cervical Cerclage

7. There is insufficient evidence to recommend the practice of cervical cerclage to reduce bleeding in placenta previa. (**III-D**)

Method of Anaesthesia for Caesarean Section

8. Regional anaesthesia may be employed for CS in the presence of placenta previa. (**II-2B**)

Placenta Previa and Placenta Accreta

 Women with a placenta previa and a prior CS are at high risk for placenta accreta. If there is imaging evidence of pathological adherence of the placenta, delivery should be planned in an appropriate setting with adequate resources. (II-2B)

Definitions:

Quality of Evidence Assessment*

- I: Evidence obtained from at least one properly randomized controlled trial
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*The quality of evidence reported in these guidelines has been adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on the Periodic Preventive Health Exam Care.

**Recommendations included in these guidelines have been adapted from the Classification of Recommendations criteria described in the Canadian Task Force on the Periodic Preventive Health Exam Care.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Accurate diagnosis of placenta previa may reduce hospital stays and unnecessary interventions.
- Transvaginal sonography has proven clinical benefit compared to transabdominal sonography for diagnosing and planning management of placenta previa.

POTENTIAL HARMS

- The association between prior Caesarean section (CS), placenta previa, and placenta accreta (pathological adherence of the placenta) is well recognized. The incidence of placenta previa climbs with the number of prior CS, and there is a suggestion that the incidence of placenta previa is rising because of the increasing CS rate.
- The risk of placenta accreta in the presence of placenta previa increases dramatically with the number of previous CS, with a 25% risk for one prior CS, and more than 40% for two prior CS. Placenta accreta is a significant condition with high potential for hysterectomy, and a maternal death rate reported at 7%.

QUALIFYING STATEMENTS

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This guideline reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Local institutions can dictate amendments to these opinions. They should be well documented if modified at the local level.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness Safety

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Oppenheimer L, Society of Obstetricians and Gynaecologists of Canada. Diagnosis and management of placenta previa. J Obstet Gynaecol Can 2007 Mar;29(3):261-6. [59 references] PubMed

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2007 Mar

GUIDELINE DEVELOPER(S)

Society of Obstetricians and Gynaecologists of Canada - Medical Specialty Society

SOURCE(S) OF FUNDING

Society of Obstetricians and Gynaecologists of Canada

GUIDELINE COMMITTEE

Maternal Fetal Medicine Committee

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the <u>Society of Obstetricians and Gynaecologists of Canada Web site</u>.

Print copies: Available from the Society of Obstetricians and Gynaecologists of Canada, La société des obstétriciens et gynécologues du Canada (SOGC) 780 promenade Echo Drive Ottawa, ON K1S 5R7 (Canada); Phone: 1-800-561-2416

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI Institute on February 11, 2009. The information was verified by the guideline developer on March 4, 2009.

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